PRELIMINARY REPORT OF INTER DIALECT GROUP MARRIAGE OF CHINESE IN WEST MALAYSIA

A.O. FRANK,

INTRODUCTION

IT HAS BEEN reported from Singapore that there is a significant degree of marriage between Chinese people of different dialect groups (Yeh, 1964). The author knows of no report from Malaysia on this subject. However, it is important to be aware of the degree of inter-marriage between different dialect groups as investigators into the aetiology of different disease processes require to look carefully into the racial background. It has already been shown in Singapore that there is a different incidence of nasopharyngeal cinoma in Chinese patients of different dialect groups (Shanmugaratnam and Tye 1970). This finding is of considerable importance to physicians and rheumatologists as our understanding of the familial predisposition to the rheumatic diseases has been enhanced by the work of Moll et al (1974), and the nearly simultaneous finding of the association of certain rheumatic disorders with the genotype HLA B 27 (Brewerton et al., 1973, and Schlosstein et al., 1973).

During 1974 — 1976 a study was conducted into the racial background of patients suffering from Systemic Lupus Erythematosus (S.L.E.). It was found that patients asked about their dialect group (Yeh, 1964) invariably gave the dialect group of their father. Only one patient gave the dialect group of her mother, and one admitted to having parents from different dialect groups. This preliminary study was designed to ascertain the degree of inter-dialect group marriage among patients attending the University Hospital.

Department of Medicine, Faculty of Medicine, University of Malaya.

A.O. FRANK.* M.B., B.S., M.R.C.P. (UK) Lecturer

* Now at:

Department of Rheumatology and Rehabilitation Salisbury General Infirmary, Fisherton Street, Salisbury, Wiltshire, United Kingdom.

PATIENTS AND METHODS

Group I consisted of 163 patients suffering from Systemic Lupus Erythematosus who were being treated as inpatients or as outpatients. Data was available from 76 patients in this group.

Group II consisted of 85 patients who were being treated in the Department of Medicine at the university Hospital, mostly as inpatients. They were a selected group matched by age and sex with patients from group I. Data was available from 80 patients in this group.

Group III consisted of all Chinese patients admitted into a female medical ward over a four month period, excluding any patients who were included in Groups I and II.

All patients were asked, through an interpreter when necessary, their age, and the dialect-group to which their parents belonged.

RESULTS

Table I shows the number of patients in each of the three groups, together with the total number of patients for which information was available, the total number of patients whose parents came from the same dialect group, and the total number of patients whose parents came from different dialect groups.

Information was available from a total of 192 patients, and of these 152 had parents who were from the same dialect groups. Thus nearly 20 per cent of the total sample came from families whose parents spoke different dialects.

Table II depicts the mean age of the different groups.

In each group the mean age of patients with parents of different dialect-groups was less than the mean age of patients with parents of the same dialect group.

Table I

Number of patients in same and different dialect groups

| Group | | Total number of patients in each group | Number of patients of known age and dialect group | Number of patients with parents from the same dialect group | Number of patients with parents from 'different' dialect groups | |
|-------|------------------------------------|--|---|--|--|--|
| I | Patients with S.L.E. | 163 | 76 | 63 | 13 | |
| 11 | Control patients for S.L.E. series | 85 | 80 | 59 | 21 | |
| П | Random Ward patients | 36 | 36 | 30 | 6 | |
| | TOTAL | | 192 | 152 | 40 | |

Table II

Age of patients in same and different dialect groups

| Group | Mean Age of Total Group | Mean Age of Group with known data | Mean Age of 'Same' Group | Mean Age of 'Different' Group | |
|-------|----------------------------|---|--|---|---|
| | (years) | (years) | (years) | (years) | |
| Ĺ | 25.6 | 26.5 | 27.7 | 20.6 | |
| 11 | 26.6 | 26.9 | 28.8 | 21.6 | |
| 111 | * | 44.5 | 45.7 | 38.7 | |
| | i i | Group Total Group (years) 1 25.6 11 26.6 | Group Total Group (years) Group with known data (years) I 25.6 26.5 II 26.6 26.9 | Group Total Group (years) Group with known data (years) 'Same' Group (years) 1 25.6 26.5 27.7 II 26.6 26.9 28.8 | Group Total Group (years) Group with known data (years) 'Same' Group (years) 'Different' Group (years) 1 25.6 26.5 27.7 20.6 II 26.6 26.9 28.8 21.6 |

^{*} Age was unknown for three patients

Table III

Distribution of patients from Groups I, II and III by age and parentage (percentage figures in brackets)

| Age in Decades | Number of patients who had parents from the same dialect group | | Number of patients who had parents from different dialect groups | | Total Number of Patients |
|----------------------------|--|--------|--|--------|-----------------------------|
| 10 — 19 | 32 | (68.1) | 15 | (31.9) | 47 |
| 20 — 29 | 58 | (79.5) | 19 | (26.0) | 77 |
| 30 — 39 | 22 | (84.6) | 4 | (15.4) | 26 |
| 40 — 49 | 14 | (100 | 0 | (0) | 14 |
| 50 — 59 | 13 | (100) | 0 | (0) | 13 |
| 60 — 69 | 6 | (75) | 2 | (25) | -8 |
| Over 69 | 4 | (100) | .0 | (0) | 4 |
| Patients of unknown age | 3 | | 0 | | 3 |
| TOTAL | 152 | | 40 | | 192 |

It can be seen that the mean age of patients from Sample III (routine ward admissions) is higher than the mean age of the other two groups. This would be expected as admissions to a general medical ward would include patients of all ages. whilst patients suffering from SLE would predominantly be in the second and third decades. In view of the fact that the third group was smaller and with a wider age distribution than the others a combined t-test was performed on the mean age of the combined total of patients in sample groups I and II only. This showed that the younger age demonstrated in patients whose parents were of different dialect groups was significantly less than the mean age of patients whose parents were of the same dialect group (0.01 > p > 0.001).

Further analysis of the age of patients in the two groups (parents of the same dialect group, and parents of different dialect groups) showed that at least two patients with mixed dialect group parents were in the sixth decade. This suggests that marriage between the different dialect groups is not a new phenomenon. The difference in mean ages, however, suggests that marriage between dialect groups is becoming more frequent. This can be confirmed by reference to Table III which shows the numbers of patients with parents of the same or different dialect groups according to their age.

It can be seen that of the 39 patients over the age of 39, only 2 had parents from different dialect groups. This decreased frequency of patients with parents from mixed dialect-group marriages with increasing age was statistically significant (x2 - 0.05 > p > 0.02).

Analysis of groups I and II by sex showed that all the men came from same dialect-group marriages (this was not a statistically significant finding). Table IV shows that the numbers of men were small, and that there was no difference in age between the sexes.

DISCUSSION

The practical importance of these findings is that investigators into social trends, or disease patterns related to ethnic factors will have to take note of the dialect groups spoken by the parents of any subject of study. It is interesting to note that the recent census (Malaysia, 1972) information was

Table IV

Distribution of patients in groups I and Ii by age and sex

| Group | Number of Men | Number of Women | | Mean Age of Women (years) |
|-----------------|------------------|--------------------|-------|------------------------------|
| 1 | 8 | 68 | 28.4 | 26.29 |
| 11 | 10 | 70 | 25.2 | 27.14 |
| Total I + II | 18 | 138 | .26.6 | 26.72 |

only obtained as to the dialect spoken by the subject interviewed. Since this data suggests that nearly 20 per cent of subjects may come from an inter-dialect group marriage, data of this kind will become increasingly hard to interpret.

It is interesting to note that Yeh found in 1964 that 61 per cent of persons interviewed in 1964 in Singapore married persons from the same dialect group (Yeh 1964). Perhaps the urban environment of Singapore predisposed to marriage outside the dialect group compared to the sample of patients in this study some of whom came from rural areas (Frank, A.O. to be published).

It is also important to note that since interdialect group marriages are not confined to the younger generation, it is not possible to predict from old data the accuracy of studies involving different dialect groups.

It is recommended that a larger study be set up to confirm these findings in view of the importance of the observations to researchers into medical or social fields.

SUMMARY

192 patients seen on the wards or in the outpatient clinics of the Department of Medicine at University Hospital were asked to which dialect group their parents belonged. Nearly 20 per cent came from families in which the parents came from different dialect groups. The age of subjects in this group was significantly less than the age of patients whose parents were from the same dialect groups. Nevertheless, they included patients in the sixth decade. The implications of these results are discussed.

ACKNOWLEDGEMENTS

The Head and Academic Staff of the Department of Medicine, Faculty of Medicine, University of Malaya for allowing me to study patients under their care; Sister Sinnathamby and Staff, Ward 12A, University Hospital, Kuala Lumpur for willing interpreting when needed; Mrs. C.M. Frank for punching data on to forms, and designing suitable programmes for analysis of patients age; Mr. S. Evans, Supervisor, the London Hospital Medical College Computer Centre, and Mr. A. Cotton, Faculty Programmer, Department of Community Medicine, University of Southampton, for allowing me to use computers under their charge; Professor K. Prathap, Department of Pathology, Faculty of Medicine, University of Malaya, for advice regarding references; Mr. R. Gann, Librarian, Salisbury General Infirmary for performing a search of the literature; Mr. J. Alexander, Lecturer in Statistics, Department of Community Medicine, University of Southampton, for statistical advice and reviewing the manuscript; Professor P. Chen, Department of Social and Preventive Medicine for reviewing the manuscript and to Mrs. H. James, Mrs. J. Druett and Mrs. M. Willis for kindly typing this manuscript.

REFERENCE

- Brewerton, D.A., Caffrey, M., Hart, F.D., et al (1973) Ankylosing Spondylitis and HL-A 27, Lancet i, 904 — 907.
- Malaysia, (1972): 1970 Population and Housing Census of Malaysia, Community groups, Department of Statistics, Kuala Lumpur, W. Malaysia. 28.
- Moll, J.M.H., Haslock, I., Macrae, I.F., Wright, V., (1974) Associations between Ankylosing Spondylitis, Psoriatic Arthritis, Reiters Disease, the intestinal arthropathies and Behcet's Syndrome. *Medicine*, 53 (5), 343 364.
- Schlosstein, L., Terasaki, P.I., Bluestone, R., Pearson, C.M., (1973) High Association of an HL-A Antigen, W27, with Ankylosing Spondylitis New England J. Med. 288, 704 — 706.
- Shanmugaratnam, K., and Tye, C.T., (1970) A Study of naso-pharyngeal cancer among Singapore Chinese with special reference to migrant status and specific community (dialect group), J. Chronic Disease, 23, 433 441.
- Yeh, S.H.K., (1964) Chinese Marriage Patterns in Singapore. Malayan Economic Review, 9, 102 — 112.